REMARKS

I. Status of the Application

Claims 1-9 are all the claims pending in the application. Claims 1-9 have been rejected. The present Amendment addresses each point of rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

II. Claim Rejections Under 35 U.S.C. § 103(a) - Widdowson

Claims 1, 2, 6, and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Widdowson et al., "Polarisation guiding in ultralong distance soliton transmission," *Electronics Letters*, Vol. 30, No. 11, 26 May 1994, pages 879-880 (hereinafter "Widdowson"). Applicants respectfully traverse these grounds of rejection.

Widdowson is generally directed to a polarization division multiplexed (PDM) and optical time division multiplexed (OTDM) transmission system (p. 880, first full paragraph). The system in Widdowson comprises a receiver that time division demultiplexes the transmitted signal (*Id.*). Widdowson also uses a polarizer in front of the demultiplexer to ensure that solitons from only one polarization state are detected (Fig. 1; *Id.*).

However, Widdowson does not teach or suggest "a polarization selective element for separating *from the isolated pulses* at least one component that has a single polarization," as recited in claim 1. This claim language requires that the polarization selective element be located *behind* the polarization insensitive optical switch, which isolates optical pulses within the pulse train. On the contrary, Fig. 1 of Widdowson shows that the polarizer is located *in front of* the demultiplexer (p. 880, first full paragraph).

The Examiner concedes that Widdowson does not disclose that the separation of the pulses is performed after the pulses have been isolated (Office Action, p. 3). However, the Examiner asserts that the receiver of Widdowson produces the same result as the claimed receiver, even though the polarizer is located *in front of* the demultiplexer (*Id.*). The Examiner further asserts that rearranging parts of an invention involves only routine skill in the art, and that it would have been obvious to a person of ordinary skill in the art to reverse the order of the polarizer and demultiplexer of the receiver of Widdowson (*Id.* at p. 4). Applicants respectfully disagree.

As discussed in the current specification, isolating the optical pulses before separating the pulses of different polarizations allows a relaxation of the constraints imposed on the OTDM demultiplexer (specification, p. 4, fourth full paragraph). This is because components in the isolated pulses that result from interchannel interference can be largely eliminated by the subsequent polarization selective element (*Id.* at p. 5, first paragraph). Also, a demultiplexer with a greater switching window can be used, and the extinction ratio of the demultiplexer can be reduced (*Id.*). Therefore, Applicants submit that it is quite clear that the claimed receiver is structurally different and produces a different result than the receiver of Widdowson. Applicants submit that it would not have been obvious to a person of ordinary skill in the art to reverse the order of the polarizer and demultiplexer of the receiver of Widdowson.

At least by virtue of the aforementioned differences, claim 1 distinguishes over Widdowson. Because claim 6 contains features that are analogous to the features recited in claim 1, claim 6 is patentable over Widdowson for analogous reasons. Further, claims 2 and 7

are dependent claims including all of the elements of independent claims 1 and 6, respectively, which as established above, distinguish over Widdowson. Therefore, claims 2 and 7 are patentable for at least the aforementioned reasons, as well as for their additionally recited features.

III. Claim Rejections Under 35 U.S.C. § 103(a) - Widdowson in view of Heismann

Claims 3-5, 8, and 9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Widdowson in view of Heismann et al., "Automatic Polarization Demultiplexer for Polarization-Multiplexed Transmission Systems," *Proceedings of the European Conference on Optical Communications*, Vol. 2, 12 September 1993, pages 401-404 (hereinafter "Heismann"). Applicants respectfully traverse these grounds of rejection.

As discussed above, Widdowson fails to teach or suggest a receiver comprising "a polarization selective element for separating *from the isolated pulses* at least one component that has a single polarization," as recited in claim 1. Heismann does not remedy this deficiency in Widdowson. Heismann discloses only a polarization demultiplexer for polarization multiplexed transmission systems, and does not isolate optical pulses with a polarization insensitive optical switch. Therefore, Applicants submit that claims 1 and 6 are patentable over Widdowson, Heismann, and their combination.

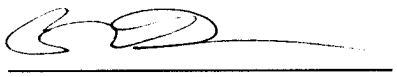
Claims 3-5, 8, and 9 are dependent claims including all of the elements of independent claims 1 and 6, respectively, which as established above, distinguish over Widdowson and Heismann. Therefore, claims 3-5, 8, and 9 are patentable for at least the aforementioned reasons, as well as for their additionally recited features.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Christopher R. Lipp
Registration No. 41,157

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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23373
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